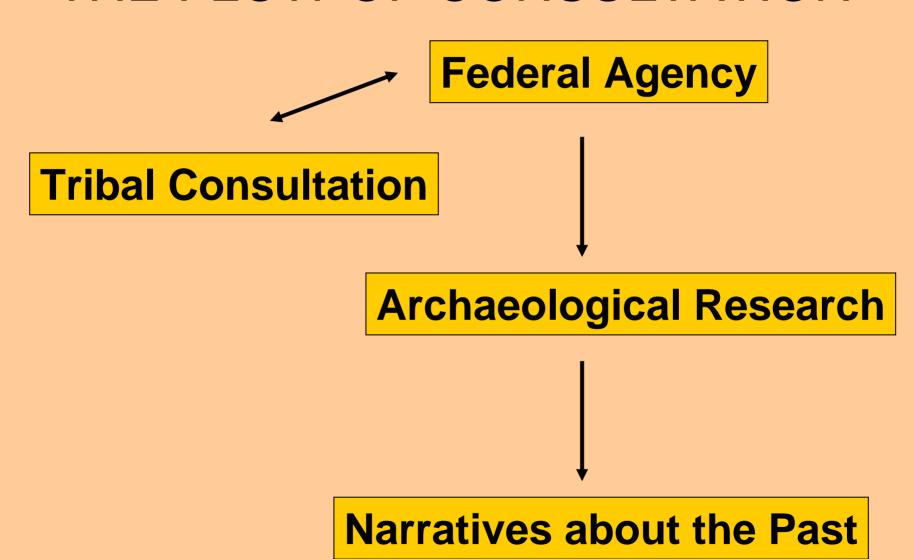
## MONITORING PROTOCOLS FOR CULTURALLY SIGNIFICANT RESOURCES WITHIN THE GRAND CANYON



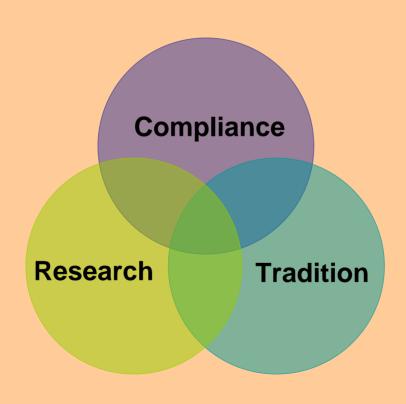
**PUEBLO OF ZUNI** 

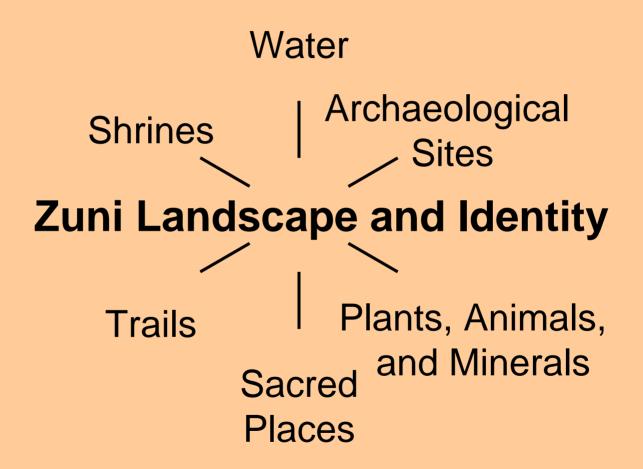
Propositions **Truths** Knowledge **Beliefs** 

### THE FLOW OF CONSULTATION



# A MODEL FOR HISTORIC PRESERVATION AND THE STRUCTURE OF COMPLIANCE

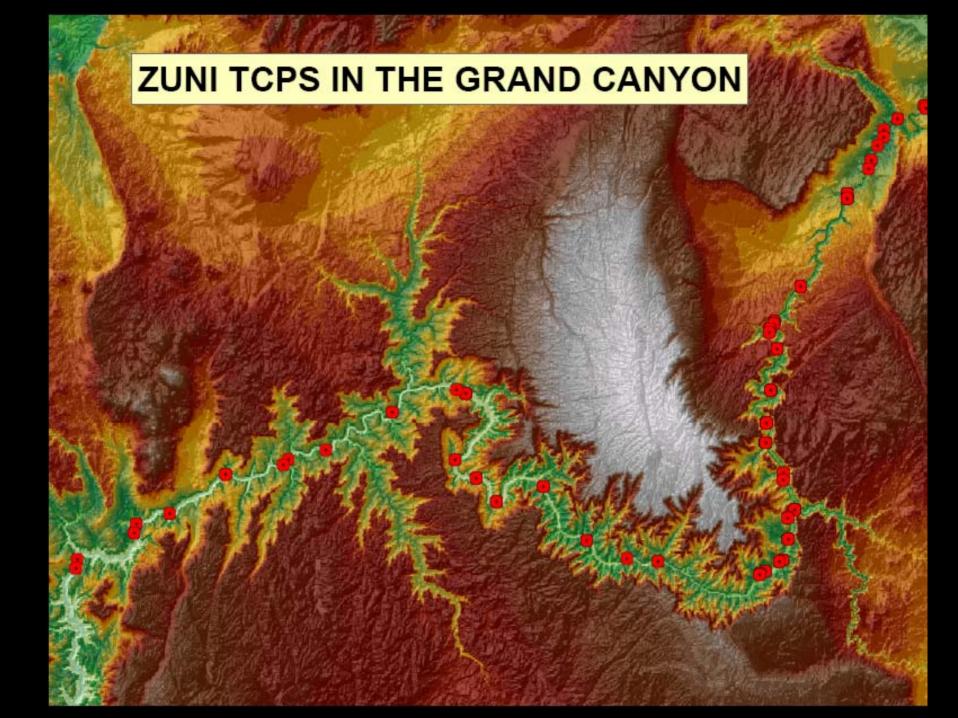




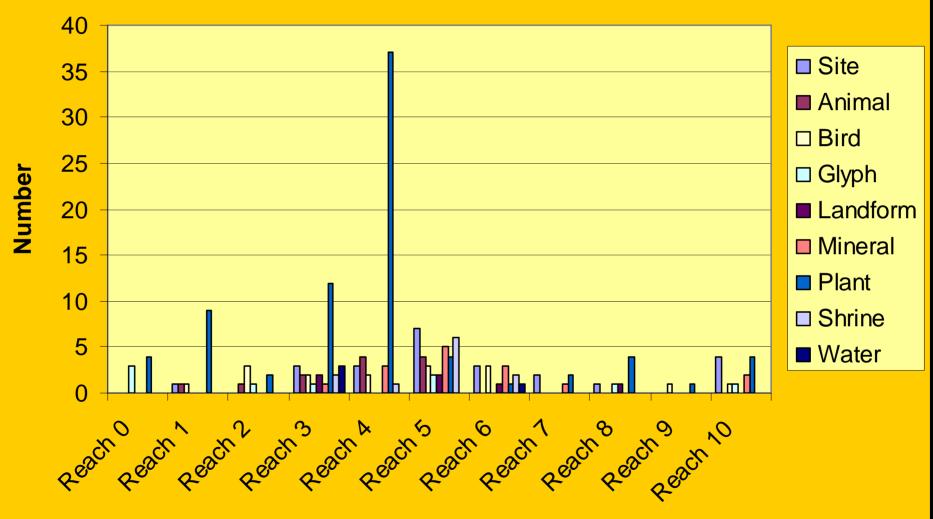
Adapted from Dongoske and Damp (2007)





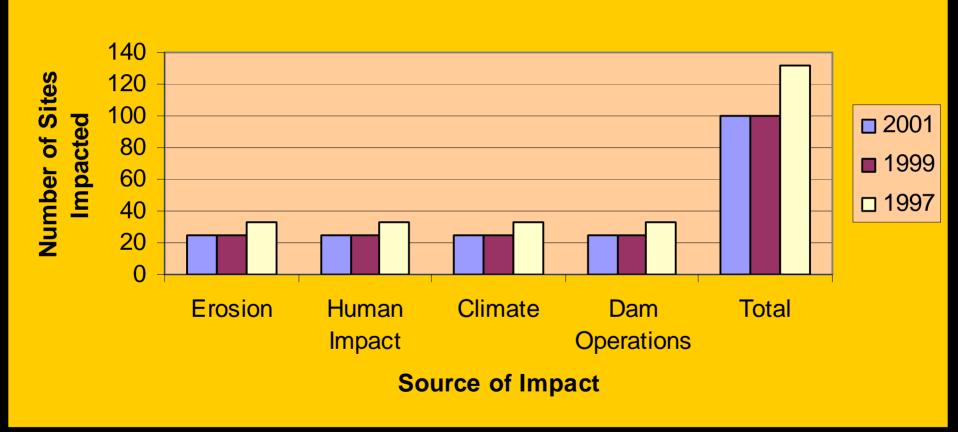


#### **Distribution of TCPs**



Reach

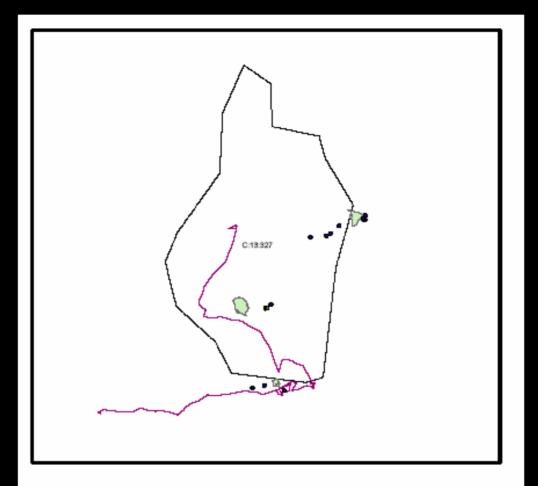
#### **Sources of Perceived Impact**



The primary purpose of a Zuni monitoring program is the collection of data that will be used to identify adverse impacts due to dam operations on Zuni TCPs situated along Colorado River corridor. Zuni monitoring data will be used to guide measures taken to preserve Zuni TCPs in place for their continued use by ancestral and contemporary Zunis, and for their use by future generations. A Zuni monitoring program will continue fieldwork geared toward the identification of Zuni TCPs. Data will be collected to assess Zuni TCP condition, make recommendations concerning remedial actions, and schedule future monitoring fieldwork.

- During the course of fieldwork at Zuni TCParchaeological sites, ZCRAT members will reconnoiter a roughly circular area with a specified radius, e.g., 200 m, to identify Zuni TCPs. The reconnaissance areas will be centered on the site datum. Reconnaissance areas may be partially delimited by topographic extremes or the present course of the river.
- Zuni monitors will employ linear transects with a specified width, e.g., 50 m, as sampling areas between site-centered sampling locales. These may follow topographically or otherwise geographically delimited areas such as a talus cliff face, side canyon, or tributary stream. These sampling areas will be randomly or judgmentally placed and placement can be stratified by river reach or by designated cfs level, if warranted.

- Spatial data for all sampling areas and Zuni TCPs visited during the course of fieldwork will be recorded with a Trimble GeoXT global positioning system (GPS). Spatial data for discrete impacts to Zuni TCPs will also be recorded. This data will be incorporated into a geographic information system (GIS) geodatabase.
  - This geodatabase should prove to be an effective tool for monitoring Zuni TCPs and assessing overall status. For instance, the spatial distributions of plant collection areas, namely plant stand coverage areas, can be monitored with repeat visits. Variation in coverage area documented during repeat visits may reflect the status of a particular plant resource. As another example, the area measurements of riverbased and terrace-based erosional channels that impact Zuni TCPs can be monitored and measured.



#### Legend

- Site\_Dat
- Sherd
- Point\_ge
- Misc\_Art
- Lithic\_A
- Ground\_S
- Linear\_f Line\_gen
  - Drainage





1:250

30 Meters

